

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-11. (Cancelled)

12. (New) A layered sensor element comprising:

an insulation;

a heater printed conductor situated in a layer plane of the sensor element, the heater printed conductor including a heater and a heater lead, the heater printed conductor being embedded in the insulation; and

a sealing frame surrounding the insulation in a layer plane of the heater printed conductor at least in some areas, wherein an extension of the sealing frame in a direction parallel to a layer plane of the sensor element and perpendicular to a longitudinal axis of the sensor element at least in some areas amounts to at least 25 percent of an extension of the sensor element in the direction.

13. (New) The sensor element according to claim 12, wherein the sensor element is for detecting a physical variable of a measuring gas.

14. (New) The sensor element according to claim 13, wherein the physical variable is a temperature.

15. (New) The sensor element according to claim 13, wherein the physical variable is a concentration of a gas component.

16. (New) The sensor element according to claim 12, wherein the extension of the sealing frame in the direction parallel to the layer plane of the sensor element and perpendicular to the longitudinal axis of the sensor element is in a range of 30 percent to 80 percent of the extension of the sensor element in the direction.

17. (New) The sensor element according to claim 12, wherein the sealing frame has a solid electrolyte, zirconium oxide stabilized by yttrium oxide.
18. (New) The sensor element according to claim 12, further comprising first and second solid electrolyte films, and wherein the sealing frame, the insulation, and the heater printed conductor are situated between the first and second solid electrolyte films, and the sealing frame surrounds the insulation and extends to an outside surface of the sensor element.
19. (New) The sensor element according to claim 12, wherein the heater printed conductor has the heater in a measuring area of the sensor element, and the heater leads leading to the heater in a feed area of the sensor element.
20. (New) The sensor element according to claim 19, wherein the extension of the sealing frame in the direction parallel to the layer plane of the sensor element and perpendicular to the longitudinal axis of the sensor element in the feed area amounts to at least 25 percent of the extension of the sensor element in the direction.
21. (New) The sensor element according to claim 20, wherein the extension of the sealing frame in the direction in the feed area amounts to 30 percent to 80 percent of the extension of the sensor element in the direction.
22. (New) The sensor element according to claim 12, wherein the heater printed conductor includes heater leads situated in different layer planes of the sensor element.
23. (New) The sensor element according to claim 12, wherein at least one of (a) the insulation has a higher porosity than the sealing frame and (b) the sealing frame is gas-tight.
24. (New) The sensor element according to claim 12, wherein a layer thickness of the sealing frame and the heater printed conductor having insulation is in a range of 52 μm to 74 μm .

25. (New) The sensor element according to claim 24, wherein the layer thickness is 60 μm .

26. (New) The sensor element according to claim 12, further comprising at least one electrochemical cell having a first electrode and a second electrode as well as a solid electrolyte situated between the first and the second electrode, a reference gas space, which contains a reference gas and in which the first electrode is situated, being situated in the sensor element.

27. (New) The sensor element according to claim 12, wherein the sealing frame contains an admixture of silicon oxide of 0.1 percent to 1.0 percent by weight.

28. (New) The sensor element according to claim 27, wherein the admixture of silicon oxide is 0.5 percent by weight.